DOCUMENT RESUME

ED 201 268 HE 013 747

AUTHOR Lynn, Mary R.
TITLE The Professional Socialization of Nursing Students: A Comparison Based on Type of Educational Program.
PUB DATE Apr 81
NOTE 40p.; Paper presented at the Annual Meeting of the American Educational Research Association (Los Angeles, CA, April 13-17, 1981).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Associate Degrees; Bachelors Degrees; Grade Point Average; Higher Education; Item Analysis; *Measurement Techniques; *Nurses; Nursing Education; Professional Development; *Rating Scales; Research Methodology; *Role Perception; Scoring; *Socialization
IDENTIFIERS *Nurses Professional Orientation Scale

ABSTRACT

Two new scoring methods for the Nurses' Professional Orientation Scale (NPOS) were developed and tested to advance the assessment of professional socialization. These methods were based on: traditional versus nontraditional view of nursing (internal consistency of .81); and practicing nurses' view of nursing (internal consistency of .88). A total of 120 associate degree and 156 baccalaureate degree nursing students from four southeastern states were compared using these methods. The traditional/nontraditional scoring key was developed from the ratings of 32 undergraduate nursing faculty members. Each faculty member rated the 59 items of the NPOS with regard to whether they judged a nurse would be traditionally or nontraditionally oriented if she or he endorsed the item. A 67 percent agreement level was used as an indication of endorsement of an item. To develop a key based on practitioners' views, 226 practitioners were administered a questionnaire, and scoring weights were calculated in an identical manner to that of the original scoring weights of the NPOS. Using a 2x3 factorial design (two program levels and three grade point levels), the associated degree students were found to be more traditionally oriented but neither student type differed when compared using the practicing nurses scoring method. It is concluded that the potential for improving available instrumentation in the area of professional socialization in nursing was demonstrated. It is suggested that with slight adaptation, the NPOS can be used for socialization assessment in other professions. Sample items from the NPOS and a bibliography are included. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED201268

THE PROFESSIONAL SOCIALIZATION OF NURSING STUDENTS: A COMPARISON BASED ON TYPE OF EDUCATIONAL PROGRAM

by

MARY R. LYNN

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Mary R. Lynn

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

HE 013 747

A paper presented at the Annual Meeting
of the American Educational Research Association
Los Angeles, April, 1981

INTRODUCTION AND REVIEW OF THE LITERATURE

Professional socialization is a specific portion of adult socialization. As a process it has been defined in several ways. Super (1965) suggests that professional socialization is the process by which someone "tries the fit" of a job. Others, including Simpson (1967) define occupational choice and socialization into a role as a means of acquiring self-identification. Moore (1969) asserts that professional socialization "involves acquiring requisite skills and also the sense of occupational identity and internalization of occupational norms typical of the fully qualified practitioner" (Moore, 1969, p. 71).

Many researchers suggest that there are phases or steps involved in professional socialization. Three phases that have been suggested are (1) the individual shifts his attention from broad societal goals to the goal of proficiency in the specific tasks of the chosen profession, (2) identifying significant others in the profession as reference source, and (3) internalizing the values, skills, and attitudes of the occupational group and adopting the behaviors it prescribes (Simpson, 1967).

Professional socialization has been explored in nursing and nursing education. Kramer (1974) asserts that the behavioral and attitudinal changes necessary to nursing are usually internalized during the

training period of the nursing program. Professional socialization in nursing is viewed by Kramer as a process of both internal and external changes in an individual which result in altered "images, expectations, skills, and norms" (Kramer, 1974, p. 38). Olesen and Whittaker (1968) view professional socialization in nursing as the fusion of person, situation, and institution. It is in this fusion that they believe the heart of professional socialization lies.

Investigations into professional socialization of nursing students indicate that the critical issue is the incongruence in the socialization processes between the nursing program and the actual nursing duties as they are defined and implemented in the various employment settings (Corwin, 1961; Kramer, 1966, 1968, 1969, 1970, 1974). Nursing schools and employment settings represent two different subcultures of the nursing world. Inadequate professional socialization has been found to result in attrition in both nursing education and nursing practice (Williams & Williams, 1959). Thus it is important to examine professional socialization in both nursing as an educational program and as an occupation.

Because there are three different educational tracks for prospective nurses, an important question is which program results in greater professional socialization for its graduates? The oldest of these programs, the hospital-based diploma school, has rarely encountered socialization incongruencies because the training was in the apprenticeship mode. With the movement of nursing education into universities in the early 1900's (baccalaureate program) and into community and junior colleges in the 1950's (associate degree program)

professional socialization became a relevant issue. No longer were the students in nursing programs receiving extensive clinical experience and exposure to the day-to-day realities of nursing. Rather a greater balance between classroom learning and clinical experience was created. Therefore, due to the educational changes over the last century, the assessment and development of professional socialization of nursing students has become and continues to be an area of interest.

Four studies were designed to investigate changes in imagery, consensus and consonance of students in baccalaureate degree programs (Brown, Swift & Oberman, 1974; Davis & Olesen, 1964; Olesen & Davis, 1966; Siegel, 1968). In all four studies it was concluded that students' ratings of traits relative to nursing were influenced by their instructors' emphasis on these same traits.

Richards (1972) and Eller (1976) reported that baccalaureate degree students were more professionally socialized than associate degree or diploma students were found to be. In both of these studies a basic assumption was that professional socialization and a traditional view of nursing are at opposite extremes of the same continum. This assumption has not been accepted by other researchers working in this area.

The previously reported studies of professional socialization have demonstrated several weaknesses. The most consistent exploration has focused on baccalaureate students exclusively (Brown et al., 1974; Davis & Olesen, 1964; Olesen & Davis, 1966; Siegel, 1968; Tetreault, 1976). Because nursing has been comprised of relatively few baccalaureate nurses, the majority of nurses have therefore not been studied. Secondly, the instruments employed have demonstrated weaknesses

which are reviewed in the next section. Finally, the assumption on which at least two of the studies are based must be questioned.

Many studies have been conducted which compare the students and graduates of the three nursing educational programs using socioeconomic variables (Bayer & Schoenfeldt, 1970; Dustan, 1964; Meleis & Farrell, 1974; Wren, 1971), cognitive variables (Bain, 1974; Dustan, 1964; Wren, 1971) and affective variables (Bayer & Schoenfeldt, 1970; Davis, 1973; Gray, Murray, Noy & Sawyer, 1977; Hoover, 1975; Nelson, 1978). Not only have few of these studies had any consistency in findings but they also have not been replicated and therefore can be seen as only preliminary investigations.

Professional socialization has been studied only sporadically. A lack of adequate socialization into a profession has been shown to produce job dissatisfaction resulting in attrition from nursing practice (Williams & Williams, 1959). The origins of professional socialization are in the educational program, yet little is known about its development. Less has been devised for its assessment. Because professional socialization is vital to the development of the nurse practitioner, this area should receive further study. It is necessary that future studies in this area be based on acceptable assumptions, compare products of different programs, and improve instrumentation in this area. These are the emphases of the present study.

Measures of Professional Socialization

Few instruments have been developed for the measurement of professional socialization in nursing. One of the first instruments was the

one used in the 1964 Davis and Olesen study. This same instrument was also used in Olesen and Davis (1966), Siegel (1968), and Brown et al. (1974). This instrument was a 19-item checklist containing broad, short statements relevant to nursing. Participants were to check the items they felt were important to nursing and those important to themselves. Rather than developing individual total scores, totals were derived for each item. The results were then reported in terms of the percentage of students checking each item.

Use of this questionnaire for the assessment of professional socialization in nursing is limited. Some of its weaknesses are (1) there is no method for deriving individual scores established, (2) the items are no more relevant to nursing than most other occupational groups, and (3) there has been no investigation on the questionnaire's reliability and/or validity.

The instruments used in the studies by Richards (1972) and Eller (1976) were not available for review nor discussed in their studies. In neither case was reliability and/or validity discussed or mentioned.

In 1974 Crocker and Brodie developed the Nurses' Professional Orientation Scale (NPOS). Their purpose in developing the NPOS was to construct a unidimensional scale that would measure congruence between student nurses' perceptions and faculty's views of the professional nursing role.

At least two researchers have used the NPOS in their studies. Rodeghero (1975) investigated the congruence of student and faculty views of nursing in one diploma program. The results reported were that students adopt professional views similar to those of their faculty.

In 1978 Thomas utilized the NPOS in a study comparing the professional socialization of associate degree, baccalaureate degree and diploma students from selected programs in a single state. Thomas found no differences in the professional socialization of students from the three education programs.

Purpose of the Study

The purpose of this study was to develop and test two new scoring methods for a prominent instrument, the Nurses' Professional Orientation Scale, used in the measurement of professional socialization. First, a scoring method based on a traditional/non-traditional view of nursing was developed and employed in an effort to differentiate graduates of different educational programs. Second, a scoring method based on the perceptions of practicing nurses was developed to assess the socialization of graduates from different educational programs. Finally, the reliabilities yielded from the new scoring methods were compared.

The scoring methods for the NPOS have been developed for three reasons. Although this instrument is widely used, its original scoring scheme suffered from several weaknesses. First, the original scoring method was based on baccalaureate degree faculty responses nine years ago. With the changes in the attitudes of women in the last few years, a scoring method formed nine years ago is unlikely to reflect the current feelings of a predominantly female profession. Second, the Traditional/Nontraditional method has been developed to ascertain if the associate degree and baccalaureate degree programs are at different points on a traditional vs. nontraditional continuum. Nursing educators and nurses in general have long argued that certain

types of programs produce graduates who are more or less traditional than graduates of other types of programs. Additionally, some researchers have reported that a traditional orientation is the opposite of professional socialization (Eller, 1976; Richards, 1972). Finally, the practicing nurses method has been derived for two reasons: (1) there has been no scoring scheme developed for an instrument which utilized the beliefs of practicing nurses, and (2) graduates entering nursing with beliefs unlike those of currently practicing nurses have experienced a reality shock which has created a great job dissatisfaction (Kramer, 1974). Therefore the ability to establish which students would be more likely to have an experience of "reality shock" would provide an aid in the decrease of attrition from nursing practice.

In this study the professional socialization of senior associate degree nursing students is compared to the professional socialization of senior baccalaureate degree nursing students. Diploma students are not included in the study for two reasons: (1) the number of diploma programs both nationwide and in the selected region has decreased markedly over the past fifteen years (less than half the programs open in 1960 remain open today), and (2) the tremendous growth of the junior colleges (associate degree) both nationwide and in the selected region has diminished the impact of diploma education for nurses.

METHODOLOGY

This study was designed for two reasons. First, the area of professional socialization in nursing requires further study specifically in terms of different educational programs. Second, available

instrumentation in the area of professional socialization is for the most part inadequate. The NPOS has shown promise in studies of professional socialization and with further testing for improvement it may prove to be of more use in the future.

Subjects

The nursing programs were selected from the National League for Nursing accredited associate and baccalaureate degree programs in six southeastern states. The initial states chosen were Alabama, Florida, Georgia, North Carolina, South Carolina, and Tennessee. These states were chosen for several reasons.

1. Taken as a group these states form a contiguous geographical area,
2. These states are approximately equidistant from the site of the study, and
3. Nursing educational programs in these states all belong to the same regional agency (the Southern Regional Educational Board) and therefore meet the same educational standards.

From each of these states one associate and one baccalaureate degree program were selected. The following criteria were used in selection:

1. Both the associate and baccalaureate degree programs were in close geographical proximity to each other,
2. Each program was state supported, and
3. No program was racially or sexually segregated.

All of the schools contacted responded to the initial contact letter. Of the programs contacted, 62 per cent of the associate degree and 55 per cent of the baccalaureate degree schools agreed to participate in the study.

The dean or director of each program distributed the questionnaire to all of the graduating seniors and when completed returned the questionnaires. A total of 557 questionnaires were distributed and 332 returned for a 60 per cent return rate. Sixteen questionnaires were completed by previously licensed registered nurses and thus were omitted from the analysis. Additionally, in one state there was no participating baccalaureate program so the paired associate degree program had to be dropped. This resulted in a total of 276 completed scales. Demographic data for the participating students are shown in Tables 1, 2 and 3.

Instrument

The NPOS was used as the measure of professional socialization in this study. The NPOS, a rating scale, is composed of 59 items representing a portion of the domain of professional socialization in nursing. In its original application (Crocker & Brodie, 1974), the internal consistency using Cronbach's Alpha and calculated on a cross validation group was $r = .89$. Construct validity for the scale was demonstrated empiracally by showing that as nursing students advanced in class rank, their views became more congruent with faculty views. Class means, i.e., freshman, sophomore, junior, and senior were significantly different ($F\ [3,240] = 34.7, p < .01$). Using Scheffe's test for pairwise comparisons it was found that the mean score (total) of each class was significantly greater than that of the lower class.

Scoring weights for the items were derived by administering the scale to 94 nursing faculty members of three universities and using the per cent of each response as the item weight. The percentage of faculty

Table 1

Number of Students Participating by Program
(n = 276)

Program	n
Associate degree	
Jefferson State Junior College	62
Georgia State University	11
Fayetteville Technical Institute	38*
Florence-Darlington Technical College	20
Columbia State Community College	27
Baccalaureate degree	
University of Alabama in Birmingham	40
Valdosta State College	45
University of South Carolina	41
University of Tennessee	30

*Dropped from the final analysis

Table 2

Percentage of Participants in Each Program
by Sex and Race Categories
(n = 276)

Program	Sex		Race		
	% Male	% Female	% Black	% White	% Oriental
Associate degree (n = 120)	7.5	92.5	10.0	89.2	.8
Baccalaureate degree (n = 156)	13.5	86.5	4.5	94.2	1.3
Total	10.9	89.1	6.9	92.0	1.0

Table 3

HSGPA By Program
(n = 276)

Program	HSGPA					
	A		B		C	
	n	%	n	%	n	%
Associate degree	32	27	76	63	12	10
Baccalaureate degree	72	46	72	46	12	8

who endorsed a particular response was rounded to the nearest tenth, which replaced the original five choice item weight. For example, if 82 per cent of the faculty chose option three on item 16, option three on item 16 would now have a scoring weight of eight, not three. This method of scoring was developed so that the only way a student could receive a high score was to respond to the NPOS in a manner similar to that of the faculty (Crocker & Brodie, 1974).

Development of the Traditional/ Nontraditional Scoring Key

From the University of Florida College of Nursing 32 undergraduate nursing faculty members were selected, due to their accessibility, to provide the data on which to develop the Traditional/ Nontraditional scoring method. Each faculty member was given the 59-item NPOS and asked to determine for each item whether a nurse would be traditionally or nontraditionally oriented if they endorsed it. A 90 per cent return rate was achieved. This is probably due to personal distribution of the instrument to each participant.

The percentage of faculty choosing each option, either traditional or nontraditional was tabulated. A 67 per cent agreement was determined to be the minimum endorsement an option must have for an item to be considered traditonally or nontraditionally oriented (standard error of this percentage = .08). For example, if for an item 72 per cent of the faculty chose the traditional option as their belief about the orientation of that item, the item would be considered a traditionally oriented item. If, however, 52 per cent of the faculty chose the traditional option on an item (leaving 48 per cent that chose nontraditional), the item was dropped from this scoring method as its orientation was not

determined when a 67 per cent cut off was applied. Thirteen items were deleted because there was not an endorsement of either option by 67 per cent of the respondents. The remaining 46 items were divided into those items with a tradition orientation (16 items) and those with a nontraditional orientation (30 items). It was decided that a high score would represent a traditional orientation, so the item weights (1 through 5) were reversed on the 30 nontraditional items. Using this manipulation, the only way an individual could achieve a high score would be to rate the behaviors described in traditional items as "important" or "extremely important" and rate the traits described in nontraditional items as "unimportant" or "undersirable." The decision for the high score to represent a traditional orientation was an arbitrary one.

Development of the Practicing Nurses Scoring Key

To develop a key based on practitioners' views, a different method was used. Six directors of nursing service were contacted in five states in the southeast to request participation in this portion of the study. These directors were chosen because the hospitals in which they were employed were in the same geographical region as the universities and community colleges that were in the data collection. The nurses in these hospitals tend to have graduated from the nursing schools in the vicinity and would therefore better represent the views of nursing in that area. Five directors agreed to participate, though all responded to the original contact letter, for an 83 per cent return rate.

A total of 565 questionnaires were mailed out and 226 returned for a return rate of 40 per cent. The scoring weights were then

calculated in a manner identical to that of the original scoring weights of the NPOS. The percentage of nurses endorsing a particular response was rounded to the nearest tenth, which replaced the original five possible responses. Each option for the 59 items was reweighted in this manner. This was done so the only way an individual could achieve a high score using this method would be to answer the item in a manner similar to that of the practicing nurses. Biographical data supplied by the practicing nurses is shown in Tables 4 and 5.

RESULTS

Hypothesis Testing

Hypothesis 1: When using the Traditional/Nontraditional scoring method, there is no difference between the mean total NPOS score of the associate degree and baccalaureate degree students.

Hypothesis 2: When using the Traditional/Nontraditional scoring method, there is no difference in total NPOS scores among students with different levels of High School Grade Point Average (HSGPA).

Hypothesis 3: There is no interaction between educational program and HSGPA which affects student scores on the NPOS, using the Traditional/Nontraditional scoring method.

Data were analyzed using a 2 X 3 factorial design with educational program and high school grade point average as independent variables and total NPOS score using the Traditional/Nontraditional method as the dependent variable. High school grade point average (HSGPA) was included in the analysis as the admission criteria for community colleges and universities are usually very different. Due to unequal

Table 4

Participating Nurses by Age, Year Licensed to Practice Nursing, and Years Not Practiced Nursing
(n = 226)

	Age	Year licensed to practice nursing	Years not practiced nursing
Mean	31.90	1967.89	1.00
Median	29.72	1971.85	.19
Mode	24.00	1975	.00
SD	9.40	11.35	2.39

Table 5

Participating Nurses by Sex, Race, Area Employed, First Nursing Degree, and Highest Educational Degree
(n = 226)

Variable	Frequency	Percentage
Sex		
Male	4	1.8
Female	222	98.2
Race		
Black	29	12.8
Hispanic	1	.4
White	195	86.3
Oriental	1	.4
Area Employed		
Medical-Surgical	97	42.9
Pediatrics	13	5.8
Obstetrics	26	11.5
Intensive care	48	21.2
Emergency room	4	1.8
Psychiatrics	22	9.7
Inservice	8	3.5
Administration	5	2.2
Admissions	1	.4
None	2	.9
First Nursing Degree		
Diploma	79	35.0
Associate degree	67	29.6
Baccalaureate degree	78	34.5
Other	2	.9
Highest Educational Degree		
Diploma	55	24.3
Associate degree	54	23.9
Baccalaureate degree	82	36.3

Table 5 (Continued)

Variable	Frequency	Percentage
Baccalaureate (Non-nursing)	10	4.4
Master's in nursing	21	9.3
Master (Non-nursing)	3	1.3
Other	1	.4

cell sizes and the possibility of a significant program-grade point interaction the classical regression solution was used (Overall & Spiegel, 1969) to test the hypotheses. The means and standard deviations are shown in Table 6. The results of the analysis are presented in Table 7. Significant main effects for educational program and high school grade point average were found ($F[1,270] = 4.39, p < .05$; $F[2,270] = 5.12, p < .05$).

The interaction of educational program and HSGPA did not result in a significant F value. When the Scheffe's procedure for pairwise post hoc comparisons was employed, students with a B HSGPA were found to have the highest mean total NPOS score.

Thus, Hypothesis 1 was rejected, indicating there is a significant difference between associate and baccalaureate degree students in their scores on the NPOS using the Traditional/Non-traditional method. On the average students in the associate degree program held a more traditional view of nursing than the students in the baccalaureate degree program did. Hypothesis 2 was rejected indicating there is also a difference among levels of HSGPA across programs. Hypothesis 3, relating the effects of interaction of educational program and HSGPA with total NPOS score using the Traditional/Nontraditional method cannot be rejected.

Hypothesis 4: When using the Practicing Nurses scoring method, there is no difference between the mean total NPOS scores of the associate degree students and the baccalaureate degree students.

Hypothesis 5: When using the Practicing Nurses scoring method, there is no difference in total NPOS score among students with respect to levels of HSGPA.

Table 6

Means and Standard Deviations of Students Total Scores by Programs and HSGPA Using the Traditional/Nontraditional Scoring Method (n = 276)

Program	HSGPA A	HSGPA B	HSGPA C	Row Total
Associate degree				
Mean	170.13	177.53	176.67	175.47
SD	15.23	17.04	17.93	16.84
Baccalaureate degree				
Mean	167.79	174.32	165.25	170.61
SD	18.05	15.21	13.65	16.76
Column total				
Mean	168.51	175.97	170.96	
SD	17.20	16.20	16.64	

Table 7

Analysis of Total NPOS Score Computed with the Traditional/Nontraditional Scoring Method as a Function of Program Type, HSGPA, and the Interaction Between Program and HSGPA
(n = 276)

Source	SS	df	MS	F
Program (A)	1203.82	1	1203.82	4.39*
HSGPA (B)	2808.63	2	1404.32	5.12*
A x B	407.58	2	203.79	.74
Residual	74110.89	270	274.49	

*$p < .05$

Hypothesis 6: There is no interaction between educational program and HSGPA which affects student scores on the NPOS when using the Practicing Nurses scoring method.

These data were analyzed using a 2 X 3 factorial design with educational program and HSGPA as independent variables and total NPOS score with the Practicing Nurses method as the dependent variable. Due to unequal cell sizes and the possibility of a significant program-grade point average interaction, the classical regression approach was again used (Overall & Spiegel, 1969). The means and standard deviations are presented in Table 8. The results of this analysis are presented in Table 9. No significant main effect for educational program or HSGPA was found. Additionally the interaction between HSGPA and educational program was not significant. Thus hypotheses 4, 5 and 6 cannot be rejected.

One research question was formulated that was investigated in this study.

Question 1: What will be the effect of the two different scoring schemes on reliability (internal consistency)?

The realiability of the NPOS scores derived from the new scoring schemes was estimated using Cronbach's Coefficient Alpha. Using the Traditional/Nontraditional scoring scheme, the internal consistency of the NPOS was $\underline{r} = .81$. When calculated on the Practicing Nurses scoring scheme the NPOS internal consistency was $\underline{r} = .88$. These results indicate that the new scoring systems for the NPOS have acceptable internal consistencies.

Table 8

Means and Standard Deviations of Students Total Scores by Programs and HSGPA Using the Practicing Nurses Scoring Method
(n = 276)

Program	HSGPA A	HSGPA B	HSGPA C	Row Total
Associate degree				
Mean	199.06	210.93	199.42	206.62
SD	42.73	22.26	44.45	31.67
Baccalaureate degree				
Mean	205.92	201.50	208.75	204.10
SD	25.40	35.18	18.18	29.87
Column total				
Mean	203.81	206.34	204.08	
SD	31.69	29.55	33.55	

Table 9

Analysis of Total NPOS Score Computed with the Practicing Nurses Scoring Method as a Function of Program Type, HSGPA and the Interaction Between Program and High School Grade Point Average
(n = 276)

Source	SS	df	MS	F
Program (A)	190.94	1	190.94	.20
HSGPA (B)	781.77	2	390.88	.42
A X B	4549.08	2	2274.54	2.43
Residual	252787.21	270	936.25	

DISCUSSION

Traditional/Nontraditional Scoring Method

When the Traditional/Nontraditional scoring method was applied to the NPOS, educational program type and HSGPA had a significant relationship to the total NPOS score. The associate degree students expressed a more traditional orientation on the NPOS than the baccalaureate degree students. This finding does not reflect on the degree of professional socialization of either of these groups of students, but rather identifies the orientation of that socialization. The fact that the associate degree students were found to have a more traditional orientation only indicates that their view of nursing is more traditional as judged by the nursing faculty who rated the items.

It is interesting that these preliminary results lend credence to the American Nurses' Association position paper on the two types of nurses (American Nurses' Association, 1965). The function of the technical or associate degree graduate nurse would be by definition more traditional. That is, being the care giver she would tend to follow a more traditional pattern in providing nursing care. Although new knowledge relevant to patient care would be incorporated, the nursing role would be as it has been characterized for many years. The baccalaureate degree graduate, defined by the American Nurses' Association as the professional nurse, would tend to be more nontraditional. The need to incorporate the cure emphasis in patient care as well as the promotion of the health and welfare of those in the community necessitates an alternative or nontraditional approach to patient care.

While other interpretations are possible, this finding is evidence of construct validity of this scoring method.

The significant main effect for HSGPA illustrates the importance of considering this variable in analyzing data of this nature. It is possible that students with certain HSGPA may incorporate the aspects of professional socialization differently or to a greater degree. No explanation is offered for the finding of a higher mean NPOS score for a B HSGPA.

In any event, control of this variable may have enabled detection of a "program" effect that would have gone unnoticed if HSGPA had not been included as a factor in this design. This suggests that this variable should be included in other comparisons of nursing educational programs.

A significant interaction between HSGPA and educational program was not found. This lack of a significant interaction was surprising, and again no explanation can be offered. Possibly admission criteria have changed to equalize entrance to junior and senior colleges. Additionally it must be remembered that these students were the "successfull" ones, and that may have decreased the possibility of finding a significant interaction.

Practicing Nurses Scoring Method

When the Practicing Nurses scoring method was applied to the NPOS neither educational program or HSGPA had a significant relationship to total NPOS score. Associate and baccalaureate degree students were found not to differ in their perception of professional nursing from the beliefs of practicing nurses. There are at least two

contending interpretations for this lack of significant findings. First, the NPOS, when scored with this method, may not be sensitive enough to detect differences that do exist. Considering that the nurses included in this scoring method were from four different educational programs (diploma, associate degree, baccalaureate degree and foreign based), varied broadly in the number of years practiced and types of practice settings, the definition of practicing nurses may have to be more narrowly defined to produce a scoring method sufficiently sensitive to detect possible differences in these educational programs.

Second, there may in fact be no differences in these educational programs when students are compared with practicing nurses on the NPOS. This does not imply that these students carry out the practice of nursing in a manner identical to or even closely similar to that of currently practicing nurses but rather that they view the fully professional, practicing nurse in the same manner.

Limitations of the Study

There are several limitations to this study. Because the educational programs were chosen as a mechanism for testing the scoring methods, the primary limitation involves sample selection. The results of this study are not generalizable to associate and baccalaureate degree students other than to those in the eight participating schools. However the fact that the scoring schemes worked so effectively for these schools is promising for their future applications. The

demonstration of their usefulness in this preliminary study makes it possible for the development of broader national norms in the area of professional socialization in nursing.

The second area is that of the groups chosen for the development of the scoring methods. The faculty employed for the development of the Traditional/Nontraditional scoring method were from a baccalaureate degree nursing program and may not represent the traditional or nontraditional views of other nurses or faculty. Finally the practicing nurses may not have accurately represented the population of nurses in the United States.

Suggestions for Future Research

In terms of the development of alternate scoring methods for the NPOS, one important suggestion for future work in this area would be to utilize a broader sample for the basis of the scoring methods. This would entail (1) defining practicing nurses and sampling to satisfy that definition, and (2) utilizing faculty from each educational program of interest as well as practicing nurses to establish the Traditional/Nontraditional scoring method.

When comparing students and graduates of educational programs relative to their professional socialization as measured by the NPOS a random national sample should be used for generalizability of the findings. It is imperative that local or regional studies be used only for preliminary investigations. The methods and instruments should be employed at a national level for the development of national norms. Such norms would be useful for further application of the NPOS in

nursing educational program evlauation as well as assessment of professional socialization in nursing practice.

Of interest would also be the investigation of practicing nurses and their scores on the NPOS relative to their basic nursing education. Although a preliminary study was conducted in this area (Rodeghero, 1975), there were limited implications for this data due to an over simplistic sampling strategy. In future research practicing nurses should be investigated using the NPOS in relationship to the area of their nursing practice and additional nursing degrees acquired.

The final suggestion for future research concerns longitudinal studies. As mentioned earlier, it takes from months to years to be socialized into a profession. It is possible that as the length of time in nursing practice increases, there may be a decrease in an individual's NPOS scores or the NPOS scores may in fact remain the same or increase. Insight into the reason why some nurses remain in practice while others leave could possibly be gained from such a longitudinal study.

Within a nursing education program the NPOS could be employed for a lonitudinal evaluation of socialization of both faculty and students. Both groups could be pretested at initial student enrollment and post tested upon student graduation. The effects of time/maturation on faculty as well as student socialization could be investigated. It has previously been determined that students adopt faculty's beliefs and attitudes, but this has not been studied longitudinally, nor has the student's effect on the faculty been investigated.

Applications of the NPOS

The NPOS with its newly developed scoring methods has several applications for nursing education. These applications are primarily focused on program evaluation. If objectives have been established for a nursing education program that have aspects of a traditional or nontraditional orientation towards nursing or congruence with beliefs of currently practicing nurses the NPOS could be employed for the assessment of the attainment of the objective(s). Similarly, the faculty's goals for the graduates of a nursing program could be evaluated by use of the NPOS with its schemes. Preliminary factor analyses have been conducted using the NPOS which have resulted in three stable factors. These factors have tentatively been labeled, (1) "super nurse" (all items relate to competence), (2) traditional nursing/women roles, and (3) professional/political activism. Most nursing programs have overall objectives which relate to these areas. Evaluation of these objectives could be enhanced by application of the NPOS.

The NPOS has applications in the educational programs for previously licensed registered nurses. With the current emphasis on the baccalaureate degree as the prerequisite for professional nursing practice, numerous collegiate programs have been opened for the diploma and associate degree nurse. Many of these programs give credit to the student for previous nursing education and/or experience (usually by examination) thereby decreasing the time a student is in the nursing program. If registered nurse students' professional

socialization were assessed upon entering the program with the NPOS, upon completion of the program the change in their socialization could be investigated using the NPOS. Two current questions in nursing education could then be addressed; (1) Does baccalaureate education resocialize the registered nurse student? and (2) Are registered nurse students socialized to the same extent that generic students are socialized?

Within other professions the NPOS also has applications. Of the 59 items, 28 identify patients, health care or nursing within their text. Of these 28, 18 items are easily changed to meet the needs of any of the professions, e.g. "Knows the health resources of the community" could be rewritten to address any community resource. The remaining ten items are centered on aspects or charactersitics of nursing, but only two would not be able to be changed for evaluation of other health professions. Accordingly, the NPOS with minor changes could be utilized for the assessment of professional socialization in other professions, e.g. health related professions, medicine, law and engineering. A similar approach for the use of the NPOS could be employed by having those in the profession complete an adapted NPOS and then evaluate students or recent graduates for their "fit within the profession".

Within any of the professions the NPOS or an adaptation may be useful for pre-employment counseling and guidance. Specialty areas within a profession may in fact have differing responses to the items. If this were true then prospective employees could be evaluated for their compatability within a specialty area. A graduate without

guidance may choose a specialty area within a profession when their attitudes and beliefs are incompatible with those already in that specialty. Subsequent role conflict and/or confusion is potentially preventable by use of the NPOS or an adaptation.

N.B. Before using either the two new scoring methods for the NPOS in studies of professional socialization or program evaluation, the objectives of the investigation must be clearly defined. These two scoring methods have virtually no relationship with each other (r = .01) and therefore may produce different results as they did in this study.

APPENDIX

SAMPLE ITEMS FROM THE NPOS

. SAMPLE ITEMS FROM THE NPOS

Professional Trait Rating Scale

Instructions: This questionnaire is composed of a list of descriptive characteristics and behaviors. You are asked to judge how essential each trait is for the practicing, professional nurse in fulfilling her role.

If you judge this trait to be:

EXTREMELY IMPORTANT	Mark 5
IMPORTANT	Mark 4
SLIGHTLY IMPORTANT	Mark 3
NOT AT ALL IMPORTANT	Mark 2
UNDESIRABLE	Mark 1

There are no right or wrong answers for these items. Judge each one in accordance with your own personal opinion.

Please note that you have been asked to rate these traits for the nurse as a practicing professional only. DO NOT RATE THEIR IMPORTANCE FOR STUDENT NURSES.

1.	Quietly and obediently takes doctor's orders.	1 2 3 4 5
2.	Questions instructions when the reason for them is not clear.	1 2 3 4 5
3.	Can usually think of several alternative solutions to a problem.	1 2 3 4 5
4.	Learns to accept the death of a patient with no overt emotional signs.	1 2 3 4 5
5.	Enjoys working with children.	1 2 3 4 5
6.	Likes to be kept busy.	1 2 3 4 5

7. Always gets a doctor's order before she initiates care for a patient. 1 2 3 4 5

8. Is willing to function as a counselor for a patient who wants to discuss his troubles. 1 2 3 4 5

9. Enjoys working with patients of all ages. 1 2 3 4 5

10. Punctual and prompt in carrying out duties. 1 2 3 4 5

11. Quickly rises to the defense of medical or hospital practices when they are criticized by layman. 1 2 3 4 5

REFERENCES

American Nurses Association (ANA). American nurses association position on education for nurses. American Journal of Nursing, 1965, 65, 106-111.

Bain, R. N. A study of the effect of several factors on the performance of nurses on the state board examination (Doctoral dissertation, New Mexico State University, 1974). Dissertation Abstracts International, 1974, 35, 3320-A. (University Microfilms No. 74-27, 515).

Bayer, A. E., & Schoenfeldt, L. F. Student interchangeability in three year and four year nursing programs. Journal of Human Resources, 1970, 5, 71-88.

Brown, J. S., Swift, Y. B., & Oberman, M. L. Bacclaureate students' images of nursing: a replication. Nursing Research, 1974, 23, 53-59.

Corwin, R. G. Professional employee: a study in conflict in nursing roles. American Journal of Sociology, 1961, 66, 604-615.

Crocker, L. M., & Brodie, B. J. Development of a scale to assess student nurses' views of the professional nursing role. Journal of Applied Psychology, 1974, 59, 233-235.

Davis, F., & Olesen, V. L. Baccalaureate students' images of nursing. Nursing Research, 1964, 13, 8-15.

Davis, G. C. Differentiation of nursing education programs through identification of nursing functions (Doctoral dissertation, Texas Technological University, 1972). Dissertation Abstracts International, 1973, 34, 132-A. (University Microfilms No. 73-16, 267).

Dustan, L. C. Characteristics of students in three types of nursing education programs. Nursing Research, 1964, 13, 159-166.

Eller, V. M. Role orientation toward professional nursing of students completing associate degree, diploma, and baccalaureate nursing education programs (Doctoral dissertation, North Carolina State University at Raleigh, 1976). Dissertation Abstracts International, 1977, 37, 2770-B. (University Microfilms No. 76-28, 474).

Gray, J., Murray, B., Noy, J., & Sawyer, J. Do graduates of technical and professional nursing programs differ in practice?. Nursing Research, 1977, 26, 368-373.

Hoover, J. Diploma vs degree nurses: are they alike?. Nursing Outlook, 1975, 23, 684-687.

Kramer, M. The new graduate speaks. American Journal of Nursing, 1966, 66, 2420-2424.

Kramer, M. The new graduate speaks again. American Journal of Nursing, 1969, 69, 1903-1907.

Kramer, M. Role conceptions of baccalaureate nurses and success in hospital nursing. Nursing Research, 1970, 19, 428-439.

Kramer, M. Reality shock: why nurses leave nursing. St. Louis: C. V. Mosby Co., 1974.

Meleis, A. I., & Farrell, K. H. Operation concern: a study of senior nursing students in three nursing programs. Nursing Research, 1974, 23, 461-468.

Moore, W. E. Occupational socialization. In D. Goslin (Ed.), Handbook of socialization theory and research. Chicago: Rand McNally & Co., 1969.

Nelson, L. F. Competence of nursing graduates in technical, communicative, and administrative skills. Nursing Research, 1978, 27, 121-125.

Olesen, V. L., & Davis, F. Baccalaureate students' images of nursing: a follow up report. Nursing Research, 1966, 15, 151-158.

Olesen, V. L., & Whittaker, E. W. The silent dialogue. San Francisco: Josey-Bass Inc., 1968.

Overall, J. E., & Spiegel, D. K. Concerning the least squares analysis of experimental data. Psychological Bulletin, 1969, 71, 311-322.

Richards, M. A. A study of differences in psychological characteristics of students graduating from three types of basic nursing programs. Nursing Research, 1972, 21, 258-261.

Rodeghero, J. A., Jr. Socialization and professional orientations of nursing students, faculty and practicing nurses. Unpublished master's thesis, Bowling Green State University, 1975.

Siegel, H. Professional socialization in two baccalaureate programs. Nursing Research, 1968, 17, 403-407.

Simpson, I. H. Paterns of socialization into professions: the case of student nurses. Sociological Inquiry, 1967, 37, 47-54.

Super, D. E. The psychology of careers. New York: Harper, 1957.

Tetreault, A. I. Selected factors associated with professional attitudes of baccalaureate nursing students. Nursing Research, 1976, 25, 49-53.

Thomas, J. T. Professional socialization of students in four types of nursing education programs (Doctoral dissertation, University of Florida, 1978). Dissertation Abstracts International, 1979, 39, 5966-A. (University Microfilms No. 7907801).

Williams, T., & Williams, M. Socialization of the student nurse. Nursing Research, 1959, 8, 18-25.

Wren, G. R. Some characteristics of freshman students in baccalaureate, diploma and associate degree nursing programs. Nursing Research, 1971, 20, 167-172.